Docket No.: 58060/M521
Amdt date December 4, 2007

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-27. (Cancelled)

28. (Currently Amended) A method for monitoring [[the]] an adjustment movement of a component in a motor vehicle, ~~in particular a window pane or a sunroof in motor vehicles,~~ the component being ~~which is~~ driven by a drive device and ~~can be adjusted~~ being adjustable in a translatory or rotary fashion, ~~wherein~~ the method comprising:

inputting, at input neurons of an input layer of a neural network, a plurality of input signals ~~which can be~~ being derived from the drive device and ~~which represent~~ representing a deceleration of the adjustment movement of the drive device ~~are input at input neurons of an input layer of a~~;

wherein the neural network ~~with~~ comprises at least one hidden layer having hidden neurons and an output layer having at least one output neuron, said neural network outputting, at the at least one output neuron of [[an]] the output layer, an output value ~~which corresponds~~ corresponding to one of [[the]] an adjusting force, [[or to]] a trapped state and[[or]] a nontrapped state of the component.

29. (Currently Amended) The method as claimed in claim 28, wherein the input signals ~~which can be~~ being derived from the drive device indirectly represent the deceleration of the adjustment movement of the drive device.

30. (Currently Amended) The method as claimed in claim 28 or 29, wherein the deceleration of the adjustment movement of the drive device is determined ~~by changing the~~ from a change in at least one of a period length, ~~and/or the~~ a motor current and~~/or the~~ a motor voltage of a drive motor of the drive device.

31. (Currently Amended) The method as claimed in claim 28, wherein the input signals ~~which can be~~ being derived from the drive device are ~~output~~ input in parallel or in series to the input neurons of the input layer of the neural network.

32. (Currently Amended) The method as claimed in claim 28, wherein [[the]] inputs of the input layer, of the at least one hidden layer and of the output layer as well as [[the]] connections of the input layer to the at least one hidden layer, [[the]] connections of [[the]] a plurality of hidden layers to one another and [[the]] connections of [[a]] the at least one hidden layer to the output layer have differing weightings.

33. (Currently Amended) The method as claimed in claim 28, ~~characterized in that~~ wherein the hidden neurons of the at least one hidden layer and the at least one output neuron of the output layer have [[a]] one of constant threshold value [[or]]and bias which shifts [[the]] an output of [[the]] transfer functions of the neurons of the at least one hidden layer and the output layer into a constant region.

34. (Currently Amended) The method as claimed in claim 28, wherein in a learning phase for at least one of the input neurons, the hidden neurons and[[/or]] the at least one output neuron[[s]] of the neural network, the method further comprises:~~in a learning phase,~~

[[-]] assigning random weightings ~~are assigned,~~;

[[-]] predefining various input patterns which are applied to the input neurons ~~are predefined~~, and calculating the associated at least one output value ~~is calculated,~~; and

[[-]] changing at least one of the weightings and~~/or the~~ a threshold value ~~are changed~~ as a function of the difference between the at least one output value and at least one ~~setpoint~~ target output value.

35. (Currently Amended) The method as claimed in claim 34, wherein [[the]] a degree of change in the weightings depends on the [[size]] magnitude of the difference between the at least one output value and the at least one ~~setpoint~~ target output value.

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36. (Currently Amended) The method as claimed in claim 34 or 35, ~~wherein~~ comprising measuring the output value ~~is measured~~ with a clip-on force measuring instrument at different spring constants, ~~or in particular at 2 N/mm and 20 N/mm~~, ~~and in that~~ wherein the clip-on force measuring instrument outputs the measured output value in an ~~way which is~~ analogous manner to the input ~~values~~ signals.

37. (Currently Amended) The method as claimed in claim 28, wherein at least one of [[the]] a motor period, [[the]] a motor current and~~/or the~~ a motor voltage of [[the]] a drive motor of the drive device are input into the input neurons as the input signals.

38. (Currently Amended) The method as claimed in claim 28, wherein an adaptation period ~~which specifies~~ specifying [[the]] a period calculated at a predefined reference voltage and ~~which is~~ being associated with [[the]] a position [[of]] on a reference ~~distance~~ travel path stored in [[the]] a learning phase is input into the input neurons as an additional input signal.

39. (Currently Amended) The method as claimed in claim 38, wherein the adaptation period is averaged, wherein ~~in that~~ the neural network calculates a new adaptation period at one of each full rotation of [[the]] a drive motor of the drive device and [[or]] in four quarter periods of the drive motor, said new adaptation period being ~~made available~~ provided at the next adjustment movement as [[an]] the adaptation period.

40. (Currently Amended) The method as claimed in claim 28, wherein the input ~~values~~ signals of the input neurons ~~are composed of~~ comprise:

[[-]] [[the]] values of an adaptation profile of the component ~~which can be adjusted~~ being adjustable in [[a]] translatory fashion[[,]];

[[-]] [[the]] values of an adaptation period [[when]] during the adjustment movement of the component ~~which can be adjusted~~ being adjustable in [[a]] translatory fashion ~~is adjusted,~~;

[[-]] a run-up flag[[,]];

[[-]] [[the]] output values of a shift register for terminal voltages of [[the]] a drive motor of the drive device[[,]];

[[-]] [[the]] output values of a shift register for period values[[,]];

[[-]] [[the]] a temperature of the drive motor[[,]];

[[-]] [[the]] an ambient temperature[[,]];

[[-]] a speed signal;

[[-]] an oscillation voltage[[,]]; and

[[-]] a preceding output value[[,]];

[[and]] wherein the adjusting force ~~which is~~ being determined by the neural ~~means~~ network is output as [[an]] the output value of [[an]] the at least one output neuron.

41. (Currently Amended) The method as claimed in claim 28, wherein in [[the]] a learning phase of the neural network, input patterns ~~which are~~ being applied to the input neurons and [[the]] ~~force~~ output values ~~which are~~ being output by the at least one output neuron are selected [[and/]]or predefined as a function of [[the]] a desired sensitivity of [[the]] a system comprising the drive device at low spring constants.

42. (Currently Amended) The method as claimed in claim 41, wherein [[the]] a learning ~~component~~ portion in the learning phase of the neural network comprises~~is composed of the~~ an adaptation period which, after each run, is determined anew ~~in the~~ during application ~~after each pass~~.

43. (Currently Amended) The method as claimed in claim 41 or 42, wherein the learning phase takes place in [[a]] the vehicle before [[the]] operational application.

44. (Currently Amended) The method as claimed in claim 43, wherein [[the]] weightings of the neural network ~~which are~~ being determined in the learning phase are defined during the operational application.

45. (Currently Amended) The method as claimed in claim 28, ~~further comprising~~ utilizing an adaptation device for determining signals of the drive device, the signals being ~~which are standardized to~~ normalized by a reference value, and for outputting adaptation values to the input layer of the neural network.

46. (Currently Amended) The method as claimed in claim 45, wherein the adaptation device ~~outputs~~ inputs, dependent on a position of the component being driven by the drive device, the adaptation values to the input neurons of the neural network as an additional input signal ~~as a function of the position~~.

47. (Previously Presented) The method as claimed in claim 45 or 46, wherein the adaptation device comprises~~is composed of~~ a neural adaptation network to whose input neurons at least one signal of the drive device is applied and whose at least one output neuron outputs the position-dependent adaptation values to the neural network.

48. (Currently Amended) The method as claimed in claim 47, wherein additional parameters comprising~~such as the~~ an ambient temperature, one of climatic data and[[or the]] a temperature and [[the]] a cooling behavior of [[the]] a drive motor of the drive device are applied to the input neurons of the neural adaptation network.

49. (Currently Amended) The method as claimed in claim ~~38 or 39~~ 47 or 48, ~~characterized in that~~ wherein the adaptation device ~~has~~ comprises one of a model of the drive device, a fuzzy system and[[or]] a mathematical model with a genetically generated algorithm.

50. (Currently Amended) The method as claimed claim 28, wherein [[the]] a drive motor of the drive device is one of stopped and[[or]] reversed as a function of the output value of the neural network and [[the]] a spring constant.

51. (Currently Amended) The method as claimed in claim 50, wherein [[the]] a logic combination of the spring constant of the drive device with the output value of the neural network is carried out by means of one of a logic circuit, a mathematical model with an algorithm and[[or]] a neural logic network.

52. (Currently Amended) The method as claimed in claim 50 or 51, wherein [[the]] a rotational speed of the drive motor is sensed, and the difference in rotational speed between two

periods of the drive motor is formed and logically combined with the output value of the neural network in such a way that:

[[-]] ~~when~~ if a first switch-off threshold value of the output value of the neural network is exceeded and [[a]] the difference in rotational speed ~~which~~ is smaller than a predefined threshold value for the difference in rotational speed ~~is exceeded~~, the drive motor is one of stopped and[[or]] reversed, up to the end of the adjustment movement, if and only if the output value of the neural network exceeds a second switch-off threshold value which is greater than the first switch-off threshold value[[,]];

[[-]] ~~when a~~ if the first switch-off threshold value of the output value of the neural network is exceeded and [[a]] the difference in rotational speed ~~which~~ is greater than [[a]] the predefined threshold value for the difference in rotational speed ~~are exceeded~~, the drive motor is one of stopped and[[or]] reversed[[,]]; and

[[-]] ~~when~~ if the second switch-off threshold value is exceeded, the drive motor is one of stopped and[[or]] reversed irrespective of the difference in rotational speed.

53. (Currently Amended) The method as claimed in claim 52, wherein, if the first switch-off threshold value of the output value of the neural network is exceeded and [[a]] the difference in rotational speed ~~which~~ is smaller than the predefined threshold value for the difference in rotational speed ~~are exceeded~~, the one of stopping and[[or]] reversing of the drive motor [[are]] is blocked even if the difference in rotational speed ~~ensuring~~ during the further adjustment movement of the drive device [[is]] becomes greater than the predefined threshold value for the difference in rotational speed.

54. (Currently Amended) The method as claimed in claim 28, ~~having~~ further comprising ~~the following steps~~:

~~evaluation of~~ evaluating the input signals by means of the neural network in order to determine at least one of a state of the motor vehicle and[[/or]] a state of [[the]] an adjustment device comprising the drive device;

~~selection of~~ selecting a set of weightings for the neural network from a ~~multiplicity~~ plurality of sets of weightings ~~irrespective~~ independent of the evaluation of the input signals and the determined state[[,]]; and

~~use of~~ using the selected set of weightings to operate the neural network while controlling the drive device ~~of~~ for driving the adjustable component ~~is being controlled~~.